

# Index of Published Material—1963

## MINING WORLD

Volume 25, Numbers 1 through 4 and 6 through 13

### AUTHORS INDEX

Month Page

Argall, George O., Jr.  
Mining Rate on High Plateau  
in 1962: See growth in 1963 Jan 22  
How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*  
Leaching Dumps to Recover  
More Southwest Copper at Lower  
Cost. Part I of II Oct 22-25, 27\*\*  
How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*  
Mining Rate on High Plateau in  
1962: See Growth in 1963 .. Jan 22-  
25\*

Bogert, John R.  
Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*  
Mexicanization: Its Impact on  
the Mining Industry of Mexico  
..... Mar 12\*

From Pyrrhotite to Pig Iron at  
COMINCO .. Apr 10-12\*\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Naica Battles Water & Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver and Zinc: Recovery High  
Sept 32-34\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

Cannon, Robert E.  
New Raise Drilling Techniques  
and Equipment .. Feb 19\*

Davis, Clarence C.  
Photogeology Plus Geophysics  
Equals Photogeophysics .. Dec 20

Davis, James E.  
How Knob Hill's Improved Mining  
Methods Minimize Cost Ac-  
celeration .. Mar 20\*

Foster, Thomas E.  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures .. May 22-26\*\*

Griswold, G. R.  
Greater Profit is the Reason that  
It Pays to Mine in Canada To-  
day .. April 14-16\*

Hewett, D. F.  
Manganese is a Clue to Deep  
Base and Precious Metals July 26-  
28\*

Holka, G. A.  
How to Make Your Own Pulp  
Density Measuring Gauge  
(Money-Making Methods) .. Aug 39

Jones, Paul L.  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*

Merklin, Kenneth E.  
Why a New Mill Drives You  
Nuts! .. Mar 16\*

Rice, Robert A.  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

### COMMODITIES INDEX

#### COPPER

Anaconda Expands Butte Com-  
pressor Plant .. Dec 16\*\*  
How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*  
Palabora—Why It's the Most  
Exciting New Copper Mine in  
the 1960's .. Sept 26-31\*\*  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
Leaching Dumps to Recover  
More Southwest Copper at Lower

Cost. Part I of II .. Oct 22-25,  
27\*\*

How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*

Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

White Pine Raises Ore Grade and  
Cuts Mining Costs .. Aug 22-25\*\*

#### GOLD

How Knob Hill's Improved  
Mining Methods Minimize Cost  
Acceleration .. Mar 20-21\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Operation. Part  
I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

#### IRON

From Pyrrhotite to Pig Iron at  
COMINCO .. Apr 10-12\*\*  
How Kaiser Stacks, Blends, and  
Reclaims Eagle Mt. Iron Ore  
..... Feb 22, 23\*  
Why Winter Doesn't Slow  
Atlantic City Iron Mine .. June 26-  
29\*

#### LEAD

Australia's New Zinc-Lead  
Smelter Uses Imperial Process  
..... Jan 16\*  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Did the Vein Really Pinch?  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

#### MANGANESE

Manganese is a Clue to Deep Base  
and Precious Metals .. July 26-28\*

#### SILVER

Improved Methods at Sunshine  
Mine Sends Higher Grade Silver  
Ore to Mill .. Feb 14\*  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

#### TRONA

Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*

#### ZINC

Australia's New Zinc-lead  
Smelter Uses Imperial Process  
..... Jan 16\*

How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-

Month Page

ploration .. Sept 36, 37, 45\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

### TITLE INDEX

Americans Attend and Present  
Papers at International Minerals  
Congress .. July 30-31\*  
Anaconda Modernizes and Ex-  
pands Compressed Air Plants at  
its Butte, Montana Operations  
..... Dec 16\*

ANFO Blasting Practice at Butte  
Mines .. Oct 30-33\*  
Australia's New Zinc-Lead  
Smelter Uses Imperial Process  
..... Jan 16\*

Colorado Mining Association:  
Miners Hear Management Prob-  
lems .. Mar 24-25\*

Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
From Pyrrhotite to Pig Iron at  
Cominco .. Apr 10-12\*\*

Greater Profit Is the Reason that  
It Pays to Mine in Canada To-  
day .. April 14-16\*

Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*  
How ASARCO Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*

How Kaiser Stacks, Blends and  
Reclaims Eagle Mt. Iron Ore  
..... Feb 22\*

How Knob Hill's Improved Min-  
ing Methods Minimize Cost Ac-  
celeration .. Mar 20\*  
How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*

How Mobile Service Trick Saves  
Time and Money at Boron Pit  
..... May 27\*

How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*

How to Make Your Own Pulp  
Density Measuring Gauge  
(Money Making Methods) .. Aug 39

Improved Methods at Sunshine  
Mine Sends Higher Grade Silver  
Ore to Mill .. Feb 14\*

International Nickel Uses ANFO  
for "Hang-up" Blasting .. Apr 8\*

Leaching Dumps to Recover  
More Southwest Copper at Lower  
Cost. Part I of II .. Oct 22-25, 27\*\*  
Maintenance Control Means  
Greater Availability for Berkeley  
Trucks .. Nov 14-15\*

Manganese is a Clue to Deep  
Base and Precious Metals July 26-  
28\*

Metal Demand Will Be How  
Large in Next Forty Years?  
..... June 30-32\*

Mexicanization: Its Impact on  
the Mining Industry of Mexico  
..... Mar 12\*

Mining Highlights For 1962 Feb 13  
Mining Rate on High Plateau in  
1962: See growth in 1963 Jan 22-25\*

Mission Mill Metallurgy—First  
Year Operational Summary Jan 28

Naica Battles Water and Costs  
as Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-  
29, 38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*

New Diesel-Electric Haulpak  
Packs 65-ton Loads Faster Up  
8.6% Grade .. Aug 30-31\*

New Raise Drilling Techniques  
and Equipment .. Feb 19\*

New Rubber Tire Mounted  
Wheel Excavator Digs and Loads  
500 Yards per Hour .. Sept 35\*

Palabora—Why It's the Most  
Exciting New Copper Mine in the  
1960's .. Sept 26-31\*\*  
Photogeology Plus Geophysics  
Equals Photogeophysics .. Dec 20

Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

Stanford-Arizona Computer Sym-  
posium Features Case History Re-  
port on Solution of an Open-Pit

Month Page

Planning Program .. Aug 20-21  
Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

Tayoltita—Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Western Mining Conference Held  
at Denver .. Mar 24  
White Pine Raises Ore Grade  
and Cuts Mining Costs .. Aug 22-25\*\*

Why a New Mill Drives You  
Nuts! .. Mar 16\*

Why Winter Doesn't Slow Atlan-  
tic City Iron Mine .. June 26-29\*

Wilderness Bill: Continuing Men-  
ace to Mining and Resource  
Strength of Nation .. Mar 22\*

### COMPANY INDEX

American Smelting and Refining  
Co. .... Jan 28; May 22-26\*\*  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Anaconda Co. .... May 20-31\*  
..... Oct 22-25, 27, 30-33\*\*  
Nov 14-15, 22-24\*\* Dec 16\*

Apex Development Co. .... Sept 36, 37, 45\*\*

Bagdad Copper Corp.  
..... Oct 22-25, 27\*\* Nov. 20-24\*\*

Columbia-Geneva Steel—Division  
of U.S. Steel .. June 26-29\*

COMINCO .. Apr 10-12\*\*

Compania Fresnillo, S.A.  
..... Aug 26-29, 38; Sept 32-34

Cia. Minera Asarco, S.A. .... May 22-26

Day Mines, Inc. .... Nov 16-19, 27

Duval Corp. .... Oct 22-25, 27

..... Nov 20-24\*\*

Inspiration Consolidated Copper  
Co. .... Oct 22-25, 27\*\* Nov 20-24\*\*

International Nickel Co. of Can-  
ada Limited .. Apr 8\*

Kaiser Steel Corp. .... Feb 22\*

Kennecott Copper Corp.  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Knob Hill Mines, Inc. .... Mar 20\*

Little Hill Mines .. May 20, 21, 50\*

Magma Copper Co. .... Jul 18-21, 47\*

Miami Copper Co.  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Minas de Naica, S.A.  
..... Aug 26-29, 38\*\* Sept 32-34\*\*

Minas de San Luis, S.A.  
..... June 20-24\*\* Jul 22-25\*\*

Mountain Goat Mine  
..... Nov 16-19, 27\*\*

Palabora Mining Co. .... Sept 26-31\*

Spokane National Mines  
..... Oct 28-29\*

Stauffer Chemical Co. of Wyo-  
ming .. Jan 12\*\*

Sulphide Corp. Pty. Ltd. .... Jan 16

Sunshine Mining Co. .... Feb 14-17

U.S. Borax and Chemical Corp.  
..... May 27\* Sept 35

White Pine Copper Co.  
..... Aug 22-25\*\*

### LOCALITY INDEX

#### ARIZONA

How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*

Mission Mill Metallurgy .. Jan 28  
Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

#### CALIFORNIA

AMC Consensus: Industry Out-  
look Best in Years .. Oct 40-41

How Kaiser Stacks, Blends, and  
Reclaims Eagle Mt. Iron Ore .. Feb 22

How Mobile Service Truck Saves  
Time and Money at Boron Pit  
..... May 27\*

New Rubber Tire Mounted  
Wheel Excavator .. Sept 35\*

#### GEORGIA

Why Winter Doesn't Slow Atlan-  
tic City Iron Mine .. June 26-29\*

\* Photograph  
\*\* Diagram or map

# Index of Published Material—1963

## MINING WORLD

Volume 25, Numbers 1 through 4 and 6 through 13

### AUTHORS INDEX

Month Page

Argall, George O., Jr.  
Mining Rate on High Plateau  
in 1962: See growth in 1963 Jan 22  
How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*  
Leaching Dumps to Recover  
More Southwest Copper at Lower  
Cost. Part I of II Oct 22-25, 27\*\*  
How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*  
Mining Rate on High Plateau in  
1962: See Growth in 1963 .. Jan 22-  
25\*

Bogert, John R.  
Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*  
Mexicanization: Its Impact on  
the Mining Industry of Mexico  
..... Mar 12\*

From Pyrrhotite to Pig Iron at  
COMINCO .. Apr 10-12\*\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Naica Battles Water & Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver and Zinc: Recovery High  
Sept 32-34\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

Cannon, Robert E.  
New Raise Drilling Techniques  
and Equipment .. Feb 19\*

Davis, Clarence C.  
Photogeology Plus Geophysics  
Equals Photogeophysics .. Dec 20

Davis, James E.  
How Knob Hill's Improved Mining  
Methods Minimize Cost Ac-  
celeration .. Mar 20\*

Foster, Thomas E.  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures .. May 22-26\*\*

Griswold, G. R.  
Greater Profit is the Reason that  
It Pays to Mine in Canada To-  
day .. April 14-16\*

Hewett, D. F.  
Manganese is a Clue to Deep  
Base and Precious Metals July 26-  
28\*

Holka, G. A.  
How to Make Your Own Pulp  
Density Measuring Gauge  
(Money-Making Methods) .. Aug 39

Jones, Paul L.  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*

Merklin, Kenneth E.  
Why a New Mill Drives You  
Nuts! .. Mar 16\*

Rice, Robert A.  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

### COMMODITIES INDEX

#### COPPER

Anaconda Expands Butte Com-  
pressor Plant .. Dec 16\*\*  
How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*  
Palabora—Why It's the Most  
Exciting New Copper Mine in  
the 1960's .. Sept 26-31\*\*  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
Leaching Dumps to Recover  
More Southwest Copper at Lower

Cost. Part I of II .. Oct 22-25,  
27\*\*

How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*

Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

White Pine Raises Ore Grade and  
Cuts Mining Costs .. Aug 22-25\*\*

#### GOLD

How Knob Hill's Improved  
Mining Methods Minimize Cost  
Acceleration .. Mar 20-21\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Operation. Part  
I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

#### IRON

From Pyrrhotite to Pig Iron at  
COMINCO .. Apr 10-12\*\*  
How Kaiser Stacks, Blends, and  
Reclaims Eagle Mt. Iron Ore  
..... Feb 22, 23\*  
Why Winter Doesn't Slow  
Atlantic City Iron Mine .. June 26-  
29\*

#### LEAD

Australia's New Zinc-Lead  
Smelter Uses Imperial Process  
..... Jan 16\*  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Did the Vein Really Pinch?  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

#### MANGANESE

Manganese is a Clue to Deep Base  
and Precious Metals .. July 26-28\*

#### SILVER

Improved Methods at Sunshine  
Mine Sends Higher Grade Silver  
Ore to Mill .. Feb 14\*  
How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Tayoltita: Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

#### TRONA

Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*

#### ZINC

Australia's New Zinc-lead  
Smelter Uses Imperial Process  
..... Jan 16\*

How Asarco Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*  
Naica Battles Water and Costs as  
Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-29,  
38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*  
Did the Vein Really Pinch? A  
Case History of Geochemical Ex-

Month Page

ploration .. Sept 36, 37, 45\*\*  
Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*

### TITLE INDEX

Americans Attend and Present  
Papers at International Minerals  
Congress .. July 30-31\*  
Anaconda Modernizes and Ex-  
pands Compressed Air Plants at  
its Butte, Montana Operations  
..... Dec 16\*

ANFO Blasting Practice at Butte  
Mines .. Oct 30-33\*  
Australia's New Zinc-Lead  
Smelter Uses Imperial Process  
..... Jan 16\*

Colorado Mining Association  
Miners Hear Management Prob-  
lems .. Mar 24-25\*

Did the Vein Really Pinch? A  
Case History of Geochemical Ex-  
ploration .. Sept 36, 37, 45\*\*  
From Pyrrhotite to Pig Iron at  
Cominco .. Apr 10-12\*\*

Greater Profit Is the Reason that  
It Pays to Mine in Canada To-  
day .. April 14-16\*

Hard Work and Persistence Pay  
Off for Idaho's Mountain Goat  
Leasers .. Nov 16-19, 27\*\*  
How ASARCO Adapts Mining  
Methods to Taxco's Complex  
Geological Structures May 22-26\*\*

How Kaiser Stacks, Blends and  
Reclaims Eagle Mt. Iron Ore  
..... Feb 22\*

How Knob Hill's Improved Min-  
ing Methods Minimize Cost Ac-  
celeration .. Mar 20\*  
How Leaching Recovers Copper  
from Waste and Leach Dumps  
in Southwest. Part II of II Nov 20-  
24\*\*

How Mobile Service Trick Saves  
Time and Money at Boron Pit  
..... May 27\*

How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*

How to Make Your Own Pulp  
Density Measuring Gauge  
(Money Making Methods) .. Aug 39

Improved Methods at Sunshine  
Mine Sends Higher Grade Silver  
Ore to Mill .. Feb 14\*

International Nickel Uses ANFO  
for "Hang-up" Blasting .. Apr 8\*

Leaching Dumps to Recover  
More Southwest Copper at Lower  
Cost. Part I of II .. Oct 22-25, 27\*\*  
Maintenance Control Means  
Greater Availability for Berkeley  
Trucks .. Nov 14-15\*

Manganese is a Clue to Deep  
Base and Precious Metals July 26-  
28\*

Metal Demand Will Be How  
Large in Next Forty Years?  
..... June 30-32\*

Mexicanization: Its Impact on  
the Mining Industry of Mexico  
..... Mar 12\*

Mining Highlights For 1962 Feb 13  
Mining Rate on High Plateau in  
1962: See growth in 1963 Jan 22-25\*

Mission Mill Metallurgy—First  
Year Operational Summary Jan 28

Naica Battles Water and Costs  
as Lead-Zinc-Silver Mining Goes  
Deeper. Part I of II .. Aug 26-  
29, 38\*\*

Naica Concentrator Floats Lead-  
Silver & Zinc: Recovery High.  
Part II of II .. Sept 32-34\*\*

New Diesel-Electric Haulpak  
Packs 65-ton Loads Faster Up  
8.6% Grade .. Aug 30-31\*

New Raise Drilling Techniques  
and Equipment .. Feb 19\*

New Rubber Tire Mounted  
Wheel Excavator Digs and Loads  
500 Yards per Hour .. Sept 35\*

Palabora—Why It's the Most  
Exciting New Copper Mine in the  
1960's .. Sept 26-31\*\*  
Photogeology Plus Geophysics  
Equals Photogeophysics .. Dec 20

Production Begins at Stauffer's  
Big Island Trona Mine .. Jan 12\*\*  
Revival for Bannack Gold Dis-  
trict? .. Oct 28-29\*

Stanford-Arizona Computer Sym-  
posium Features Case History Re-  
port on Solution of an Open-Pit

Month Page

Planning Program .. Aug 20-21  
Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

Tayoltita—Mexico's Most Important  
Silver-Gold Mining Operation.  
Part I of II .. June 20-24\*\*  
Tayoltita Cyanide Mill Has High  
Recovery Rate. Part II of II  
..... July 22-25\*\*

Western Mining Conference Held  
at Denver .. Mar 24  
White Pine Raises Ore Grade  
and Cuts Mining Costs .. Aug 22-25\*\*

Why a New Mill Drives You  
Nuts! .. Mar 16\*

Why Winter Doesn't Slow Atlan-  
tic City Iron Mine .. June 26-29\*

Wilderness Bill: Continuing Men-  
ace to Mining and Resource  
Strength of Nation .. Mar 22\*

### COMPANY INDEX

American Smelting and Refining  
Co. .... Jan 28; May 22-26\*\*  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Anaconda Co. .... May 20-31\*  
..... Oct 22-25, 27, 30-33\*\*  
Nov 14-15, 22-24\*\* Dec 16\*

Apex Development Co. .... Sept 36, 37, 45\*\*

Bagdad Copper Corp.  
..... Oct 22-25, 27\*\* Nov. 20-24\*\*

Columbia-Geneva Steel—Division  
of U.S. Steel .. June 26-29\*

COMINCO .. Apr 10-12\*\*  
Compania Fresnillo, S.A.  
..... Aug 26-29, 38; Sept 32-34

Cia. Minera Asarco, S.A. .... May 22-26

Day Mines, Inc. .... Nov 16-19, 27

Duval Corp. .... Oct 22-25, 27

Inspiration Consolidated Copper  
Co. .... Oct 22-25, 27\*\* Nov 20-24\*\*

International Nickel Co. of Can-  
ada Limited .. Apr 8\*

Kaiser Steel Corp. .... Feb 22\*

Kennecott Copper Corp.  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Knob Hill Mines, Inc. .... Mar 20\*

Little Hill Mines .. May 20, 21, 50\*

Magma Copper Co. .... Jul 18-21, 47\*

Miami Copper Co.  
..... Oct 22-25, 27\*\* Nov 20-24\*\*

Minas de Naica, S.A.  
..... Aug 26-29, 38\*\* Sept 32-34\*\*

Minas de San Luis, S.A.  
..... June 20-24\*\* Jul 22-25\*\*

Mountain Goat Mine  
..... Nov 16-19, 27\*\*

Palabora Mining Co. .... Sept 26-31\*

Spokane National Mines  
..... Oct 28-29\*

Stauffer Chemical Co. of Wyo-  
ming .. Jan 12\*\*

Sulphide Corp. Pty. Ltd. .... Jan 16

Sunshine Mining Co. .... Feb 14-17

U.S. Borax and Chemical Corp.  
..... May 27\* Sept 35

White Pine Copper Co.  
..... Aug 22-25\*\*

### LOCALITY INDEX

#### ARIZONA

How San Manuel Used First  
Level Experience to Improve  
Second Level Mining .. July 18-  
21, 47\*

Mission Mill Metallurgy .. Jan 28

Story of Dave McGee Mining  
Copper Flux in Arizona .. May 20,  
21, 50\*

#### CALIFORNIA

AMC Consensus: Industry Out-  
look Best in Years .. Oct 40-41

How Kaiser Stacks, Blends, and  
Reclaims Eagle Mt. Iron Ore .. Feb 22

How Mobile Service Truck Saves  
Time and Money at Boron Pit  
..... May 27\*

New Rubber Tire Mounted  
Wheel Excavator .. Sept 35\*

#### GEORGIA

Why Winter Doesn't Slow Atlan-  
tic City Iron Mine .. June 26-29\*

\* Photograph  
\*\* Diagram or map

## IDAHO

Improved Methods at Sunshine Mine Send Higher Grade Silver Ore to Mill ..... Feb 14  
Hard Work and Persistence Pay Off for Idaho's Mountain Goat Leasers ..... Nov 16-19, 27\*\*

## MICHIGAN

White Pine Raises Ore Grade and Cuts Mining Costs Aug 22-25\*\*

## MONTANA

Anaconda Expands Butte Compressor Plant ..... Dec 16\*  
New Diesel-electric Haulpak Packs 65 ton Load Faster up 8.0% Grade ..... Oct 28-29, 30-33  
Aug 30-31\* Nov 14-15  
Revival For Bannack Gold District? ..... Oct 28-29\*  
AN-FO Blasting Practice at Butte Mines ..... Oct 30-33\*  
Maintenance Control Means Greater Availability for Berkeley Trucks ..... Nov 14-15\*

## WASHINGTON

Did the Vein Really Pinch? A Case History of Geochemical Exploration ..... Sep 36, 37, 45\*\*  
How Knob Hill's Improved Mining Methods Minimize Cost Acceleration ..... Mar 20\*  
Improved Methods at Sunshine Mine Send Higher Grade Silver Ore to Mill ..... Feb 14-17\*

## WYOMING

Production Begins at Stauffer's Big Island Trona Mine ..... Jan 12\*\*  
Why Winter Doesn't Slow Atlantic City Iron Mine ..... Jun 26-27\*

## FOREIGN COUNTRIES

**AFRICA**  
Palabora—Why It's the Most Exciting New Copper Mine in the 1960's ..... Sept 26-31\*\*

## AUSTRALIA

Australia's New Zinc-lead Smelter Uses Imperial Process ..... Jan 16\*

## CANADA

From Pyrrhotite to Pig Iron at COMINCO ..... Apr 10-12\*\*  
Greater Profit is the Reason that It Pays to Mine in Canada Today ..... Apr 14-16\*  
International Nickel Uses AN-FO for "Hang-Up" Blasting ..... Apr 8\*

## FRANCE

Americans Attend and Present Papers at International Minerals Congress ..... Jul 30-31

## MEXICO

Mexicanization: Its Impact on the Mining Industry of Mexico ..... Mar 12\*  
How ASARCO Adapts Mining Methods to Taxco's Complex Geological Structures ..... May 22-26\*\*  
Tayoltita: Mexico's Most Important Silver-Gold Mining Operation. Part I of II ..... June 20-24\*\*  
Tayoltita Cyanide Mill Has High Recovery Rate. Part II of II ..... July 22-25\*\*

Manganese is a Clue to Deep Base and Precious Metals ..... Jul 26-28  
Naica Battles Water and Costs as Lead-Zinc-Silver Mining Goes Deeper. Part I of II ..... Aug 26-29, 38\*\*  
Naica Concentrator Floats Lead-Silver & Zinc: Recovery High. Part II of II ..... Sept 32-34\*\*

## COMPANY INDEX

United States Companies  
(News Section)

### -A-

A.A.A. Oil & Minerals Co. .... Jan 43  
A & B Mining Company ..... July 44  
Alaska Int'l Corp. .... Sept 55  
Alaska Mines & Minerals ..... Jan 37  
Allied Chemical Corp. .... Feb 34  
Allied Mission Oil ..... Jan 43, Mar 43  
Alumina Caribe ..... Sept 47  
Aluminum Co. of America ..... Nov 37  
Aluminum Silicates Co. .... Jan 40  
American Agr. Chem. Co. .... July 43  
Dec 35  
American Cyanamid Co. .... Jan 36  
May 41, Nov 38  
American Exploration Co. .... Sept 47

## American Expl. & Mining Co.

June 41  
American Gilsonite ..... Apr 31, May 46  
American Metal Climax ..... Apr 24, 26  
May 37, June 42, Aug 44, Sept 47

## American Molybdenum Corp.

Nov 44

## American Peru Mining Co.

Feb 33

## American Potash & Chem.

Mar 28

## ASARCO

Jan 36, 37, 43 Feb 30, 32 Mar 36\* Apr 25, 26 May 43, 35 July 38, 41, 42 Sep 53, 54\*, 58, 60, 62, 64, 66 Oct 45 Nov 39, 42 Dec 44

## American Steel & Wire

Nov 39

## American Zinc Co. of Tenn.

Apr 27

## American Zinc, Lead & Smelt

Jun 41, Oct 42\*\*

## Arizona Pub. Service Co.

Jan 11

## Arizona Silver, Inc.

Jan 37, Mar 39, May 41

## Arista Claims

Feb 37, 44

## American Investments Inc.

Feb 31

## Anaconda Co.

Jan 11, 41, 44, Feb 30, 36, 37 Mar 28 Apr 25, 29 May 19\*, 37, 43, 44 Jun 41 Jul 44, 45 Aug 21, 42, 45 Sept 25\*, Oct 21\*, 43, 44, 45, 46 Nov 40, 42 Dec 39

## Andrade Ranch Homestead

May 38

## Appalachian Sulphides

Feb 35 Mar 40

## Arizona Pub. Service Co.

Aug 41\*

## Arizona Silver, Inc.

Jan 37

## Arista Claims

May 38

## Arizona Chemcopper Corp.

May 37

## Arkansas-Louisiana Gas Co.

Aug 43

## Arkota Steel Company

Nov 36

## Armour Company

Apr 27, Oct 48

## Arvonia Buckingham Slate Co.

Jun 46\*

## Ashton Co., Inc.

Oct 43

## Assoc. Mining Construction

Jun 41

## Aston Mineral Engr.

Apr 26, Jun 41

## Atlas Corp.

Feb 38, Apr 26

## Atlas Minerals Inc.

May 37, Sep 68, 69, Nov 41 Dec 15

## Atlas Minerals Inc.

Mar 44, Nov 43

### -B-

## B & B Mining Company

July 40

## B O W Mining Co.

Jan 36

## Babcock & Wilcox

Aug 44

## Bagdad Copper Corp.

May 37

## Banner Mining Co.

Apr 25\*\*

## Barry County Minerals, Inc.

May 43

## Basic Inc.

Dec 39, 40

## Baugh Chemical Company

Nov 38, Dec 35

## Bay West, Inc.

Mar 37, May 37, Nov 36

## Bear Creek Mining Co.

Feb 30

## Banner Mining Co.

May 37, Aug 21, Sep 47

## Beaver Mesa Uranium, Inc.

Jan 43

## Bennett Mining Co.

Dec 38

## Beryllium Associates

Mch 43

## Beryllium Resources, Inc.

Feb 37

## Best Mines Company

Feb 30, 31, 41

## Belthelheim Steel Corp.

May 40, 42

## Bigbee & Stephenson Inc.

Sep 47, Nov 39

## Big Bird Develop. Co.

Feb 31

## Big Creek Apex Mining Co.

Feb 36

## Billings Mining & Mill Co.

Mar 41

## Black Hawk Mng.

Limited Mar 11\*\* Jul 43, Aug 44

## Black Hills Bentonite Co.

Jul 46, Aug 48, Nov 44

## Black Rock Mining (Subsid. Kelsey Assoc.)

May 40

## Blue Quail Mining

Dec 36

## Bonneville Ltd.

Apr 31

## Boulder Scientific Co.

Sep 25\*

## Boyles Brothers Drilling

Apr 29, Aug 42

## Brown Mining Co.

Dec 37

## Brush Beryllium Corp.

Feb 38, Dec 40

## Buckeye Mica Co.

May 38

## Bulldog Mountain Inc.

Nov 38

## Bunker Hill

Jan 11, 43, Feb 30, 35 Mar 11 Apr 28 May 38, 44, 46 Jul 44 Aug 47 Sep 42, 53, 54\*, 62, 66 Oct 45, 46, 1. ov 37, 39 Dec 38, 39

### -C-

## CBS Mining & Milg. Co.

May 45

## Cabot Corp. of Boston

Mar 28

## Caledonia Silver-Lead Mng. Nov 41

## Calera Mining Co.

Oct 45

## Callahan Mining Co.

Mar 36\*, 41

## Calmin Mines Inc.

May 43, Jul 45, Dec 36

## Calumet & Hecla

Jan 36, Jun 41

## Calaveras Central Gold

Feb 33, Mar 39

## Campbell Limestone Co.

Nov 38

## Carey Salt Company

Feb 33

## Cargill, Inc.

May 43

## Carolina Pyrophyllite Co.

May 41

## Center Star Gold Mines, Inc.

Apr 28

## Centennial Mining

Dec 39

## Centennial Develop.

May 44, Sep 68

## Chapman Wood and Griswold

Feb 33

## Chemicals Corp.

May 37

## Chester Mining Co.

Aug 45

## Chicago Alaska Mng. Co.

Mar 37

## Chief Consol. Mng. Co.

Oct 48

## Chino Mines Div., Kennecott Copper Corp.

Aug 46, Oct 47

## Cities Service

Dec 35

## Henry Clay Mines, Inc.

May 45

## Clayton Uranium Co.

Sep 69

## Clayton Silver Mines

Jan 40

## Cleveland-Cliffs Iron Co.

Sep 62

## Climax Molybdenum Co.

Mar 39

## Climax Molybdenum Co.

Mar 39, Jun 44, Jul 41, Aug 44 Sep 56, 58, Nov 38

## Climax Uranium Company

Jan 43

## Costal Mining Co. Ltd.

May 40

## Coeur d'Alenes Co.

Jul 43, Aug 44

## Coeur d'Alenes Mines Corp.

Feb 36

## Coeur d'Alenes Silver Mt. Mining Co.

Dec 39

## Cosmine Granite of

Jul 43, Oct 44

## Colorado Fuel & Iron Corp.

Aug 48

## Columbia-Geneva Steel Div.

Feb 38

## Columbia Iron Mng. Co.

Feb 47, Jul 46, Nov 39

## Combined Metals Reduc. Co.

Feb 37

## Combined Produc. Assoc.

May 19

## Commonwealth Aluminum Corp.

Dec 15

## Condon & Carey

Aug 41

## Conjecture Mines, Inc.

Nov 39

## Cons. Alleghany Mines, Inc.

Jul 41

## Cons. Coppermines Corp.

Mar 28

## Cons. Mines Selection Ltd.

Sep 47

## Cons. Parnett Corp.

Jul 41

## Cons. Coal Co.

May 45

## Continental Oil Co.

Jul 43, Sep 68, Dec 35

## Continental Uranium Co.

Aug 48

## Cosmine Rionito of

Jul 43, Oct 44

## Copper Range Company

Aug 41\*

## Coronado Copper & Zinc Co.

Jun 44, Aug 21, Oct



Kaiser Steel Corp. ....Apr 25,  
Oct 43, Dec 37  
Kelray Mining Co. ....May 37  
Kendrick Bay Mng. Co. ....Mar 37  
Kennecott Copper Corp. ....Jan 43  
Feb 31, 37, 38, Mar 11, Apr 26  
Apr 26, 29, 30, May 37, 38, 43  
Jul 43, 46, Jun 42\*, Aug 21, 47  
Sep 47, 55, 56, 68, Oct 43, 46  
Nov 13\*, 38, Dec 35  
Kentucky Fluorspar Co. ....Jan 45  
Kermac Nuclear Corp. ....Feb 33  
Apr 29, May 37, Jul 37, Aug 44  
Sep 53\*, Nov 38, Dec 35  
Kermac Potash Co. Jan 42, May 43  
Kern County Land Co. ....Mar 36  
May 46, Jul 17\*\*  
Kerr McGee Oil Ind. Inc. ....Jan 38  
Jan 42, Mar 42, Apr 24, May 38  
May 45, Aug 42, 46, Oct 43  
Nov 37, 38, 41 Dec 15, 35, 36  
Keystone Mng. Co. ....Jan 38  
Keystone Mines, Inc. ....Nov 36  
Keystone Silver Mines Inc. Nov 39  
King's Ransom Mine ....May 19  
Knob Hill Mines, Inc. ....Jan 41  
Jan 44, Feb 47, Jul 46, Aug 48  
Oct 42, 48

**-L-**

L-D Mines ....Feb 38,  
May 46, Dec 15  
Lehman Brothers ....Jan 36, Nov 37  
Lincoln Mining Co. Mar 41, Sep 62  
Lincoln National Concen-  
trates Corp. ....Feb 35  
Luhium Corp. of America ....Feb 35  
Little Squaw Mng. Co. ....Jul 39  
Aug 42, Nov 36  
Lookout Mountain Mining  
and Milling Co. ....Nov 41  
Lovitt Mining Co. ....Feb 38  
Lucky Friday Silver-Lead  
Mines Co. ....Feb 35, 36  
May 43, Jul 44, Sep 53, 54  
Lucky Mc Uranium Corp. ....Aug 48  
Lucky Seven Mining Co. ....Mar 37

**-Mc-**

McFarland & Hullinger ....May 46  
Jul 42, Aug 42, Sep 58, Oct 43  
Arthur G. McKee Co. ....Oct 46  
McLouth Steel Corp. ....Jul 44

**-M-**

M M & S Explor. Co. ....May 19  
Dec 15  
Magma Copper Company ....Feb 32  
Jun 43, Nov 38  
Magma Mining ....Jan 40, Feb 36  
Apr 28, Nov 39  
Magnet Cove Barium Corp. Jun 44  
Jul 43, 46, Dec 35  
Maiden Rock Silica Sand Co. Aug 43  
Majestic Oil Mng. Co. ....May 45  
Malfour Corp. ....Sep 60  
Manidon Mining Co. Jan 43 Mar 45  
Marble Prod. of Georgia ....Oct 44  
Marquette Mining Co. ....Nov 35\*\*  
Martin Marietta Corp. ....Feb 35  
Maryland Green Marble  
Corp. ....May 41  
Matanuska Coal ....Dec 36  
Mecca Mining Co. ....May 45  
Meramec Mining Co. ....Apr 27  
May 42\*, Aug 43 Dec 35  
Merger Mines Corp. Jul 44, Oct 45  
Mesabi Iron Company ....Mar 35  
Metal & Thermit Corp. ....Jan 40  
Metals Reserve Co. ....Apr 24  
Michigan Limestone, Inc. ....Nov 39  
Micro Copper Corp. ....Sep 68  
Mid-Continent Uranium Co. Jul 45  
Midwest Oil Corp. ....Sep 68, 69  
Midwest Ore Company ....Feb 33  
Milbank & Company ....Feb 37  
Milwhite Company Inc. ....Feb 33  
Minark Co. ....Jan 39  
Mineral Explor. ....Dec 38  
Minerals & Chemicals  
Phillips Corp. ....Sep 47, Oct 48  
Mines Development Inc. ....Oct 47  
Mineralands, Inc. ....Apr 31  
Minerals Eng. Co. ....Feb 34, Oct 44  
Mines Development, Inc. ....May 37  
May 46, Jul 42  
Mohave Constr. Co. ....Sep 56  
Molybdenum Corp. of  
America ....May 43, Jul 41, 45  
Aug 43, 44  
Money Metals Mining Co. ....Mar 38  
Monitor Mining Co. ....Oct 46  
Monsanto Chemical Corp. ....Jan 43  
Jul 44, Sep 54\*, Oct 45  
Dec 35  
Montana Phos. Prod. Co. ....Jan 41  
Feb 36, Mar 41, Sep 64  
Montana-Standard Mng. Co. May 44  
W. S. Moore Company ....Jan 41  
Aug 45, Nov 42  
Morrison-Knudsen Inc. ....May 38  
Jul 39, Nov 37

Morton Chemical Co. ....Feb 33  
Mountain Copper Co.  
of Calif. ....Feb 32  
Mt. Newman Iron Ore Co. ....Oct 44  
Mt. Wheeler Mines, Inc. ....Feb 37  
Murray Mining Corp. Ltd. ....Sep 47

**-N-**

Nancy Lee Mines ....Dec 39  
Nash & McFarland ....Mar 37  
May 37, Jul 40  
National Potash Co. ....May 45  
National Tube, Inc. ....Nov 39  
Nevada-Massachusetts Co. ....Jan 42  
Oct 46  
New Departure ....Feb 36  
New Idria Mining &  
Chemical Company ....Mar 40  
New Jersey Zinc Co. ....Jan 42  
Feb 37, Aug 43, Oct 49  
Dec 37  
New Market Zinc Co. ....Apr 27  
Jun 45  
Newmont Mining Corp. ....Feb 32,  
Apr 24, May 19, 44, Jul 44, Sep  
35, 68, 69, Nov 41, 42, Dec 15  
New Park Mng. Co. ....Jan 43  
May 45, Nov 42, 43, 44  
New Potosi Mine ....Feb 37  
Nicol Indust. Minerals Corp May 44  
North Amer. Drilling Co. ....Feb 33  
North Carol. Phosphate  
Corp. ....Jul 43  
Northern Continental, Inc. ....May 19  
Northern Natural Gas Co. ....Jan 41  
Northwest Alloys, Inc. ....Apr 31  
Northwest Magnesite Co. ....May 46  
Northwest Prospecting &  
Development Co. ....Jan 62

**-O-**

Occidental Oil ....Dec 35  
Oglebay Norton & Co. ....Oct 45,  
Dec 38  
Olin Mathieson Chem. Corp. Jan 11  
Olivine Corporation ....Aug 48  
Oliver Iron Mng. Div. ....Feb 36  
Jul 44, Oct 45, Nov 39, 40, Dec 38  
O'Neill Gothermal, Inc. ....May 39  
Original Sixteen to One  
Mines, Inc. ....Aug 43  
Ozark-Mahoning Corp. ....Sep 56, 58

**-P-**

Pamlico Mng. & Copper ....Dec 35  
Park City Cons. Mines Co. ....Jul 42  
Sep 58  
Ralph M. Parsons Co. ....Oct 21  
Parson-Jurden Corp. ....Mar 35  
Apr 25, Jun 43, Sep 56, Oct 42  
Peabody Coal Co. ....Jan 41  
Pend Oreille Mines and  
Metals Co. ....Aug 48  
Pepin Shore Silica Sand Co. Aug 43  
Petrochemicals, Inc. ....Feb 38  
May 37, Jul 46, Oct 45  
Phelps Dodge Corp. ....Jan 36  
Feb 31, 32, 38, May 38, Jun 43  
Jul 39, 40, Aug 42, 47, 21  
Sep 60, Nov 37, Dec 39  
Phillips Petroleum Co. ....Feb 36  
May 37, Sep 65  
Pickands Mather & Co. ....Aug 45  
Sep 62, Oct 46, Dec 38  
Pima Mining Co. ....Mar 38,  
Sep 56\*, Dec 36  
Pinnacle Exploration, Inc. ....Jun 44  
Sep 58  
Pittsburgh-Pacific Co. ....Sep 62  
Pittsburgh Plate Glass Co. ....Jun 41  
Oct 44  
Placer Develop. Ltd. Jun 41, Jul 17  
Plantation Clay Co. ....Feb 33  
Ponce Mining Co. ....Sep 47  
Potash Company of America Jan 36  
Apr 29  
Princeton Mining Co. ....Jan 40  
Feb 36  
Process Engineering, Devel. &  
Equipment Co. ....Sep 55, 56  
Puritan Mining Co. ....Nov 39

**-Q-**

Quinta Corporation ....Aug 46

**-R-**

R. T. Mining Co. ....Jul 45  
R. T. Corporation ....Nov 42  
Ranchers Expl. & Develop. ....Mar 42  
Rate Metals, Inc. ....Jan 37, 38  
Raymond International ....Sep 47  
Red Devil ....Jan 37  
Red Feather Mining Co. ....May 46  
Red Shirt Mining &  
Milling Company ....Aug 48  
Reese Mng. & Mfg. Co. Inc. May 45

Republic Steel Corp. ....Mar 40  
Sep 47  
Reserve Mining Co. ....Mar 35  
May 45, Aug 21, 45, Sep 64  
Richfield Oil Corp. May 45, Sep 68  
Richmond-Eureka Mng. Co. May 44  
Nov 42  
Richmond Hill Expl. Co. ....Oct 44  
Rio Argentine Mng. Co. ....Jan 39  
May 40, Jul 41  
Rochester & Pittsburg ....Dec 40  
Rocky City Mng. Corp. ....Nov 39  
Rocky Mountain Phosph. Inc. Jul 45  
Romero-Traen Mng. Apr 29 Sep 64  
Royster Chem. Corp. ....Dec 35  
Ruby Hill Mining Co. ....May 44

**-S-**

St. Joseph Lead Co. ....May 42  
Jun 44, Nov 37, Sep 25\*\*  
Nov 37  
Salmon River Scheelite ....Sep 62  
San Francisco Chem. Co. ....Jul 46  
Sawyer Petroleum Co. ....Feb 31  
Mar 38, May 37  
Shamrock Mng. Co. Jan 43, May 46  
Shattuck Denn Mng. Co. ....Nov 36  
Shirley Basin Partners ....Apr 31  
Shoni Uranium Corp. ....Feb 38  
Mar 45  
Showlow Mines Corp. ....Sep 47  
Sidney Mining Co. ....Aug 48  
Sierra Cinders Co. ....May 38  
Sierra Del Oro Mng. Co. ....Nov 41  
Dec 15  
Sierra Nevada Co. ....May 19  
Dec 15  
Sierra Tale Co. ....Dec 39  
Silver Belle-Martinez Mine ....Jan 36  
Silver Dollar Mng. Co. ....Mar 41  
Aug 45, Sep 62  
Silver King Mines Inc. ....Feb 30  
Silver Shield ....May 38  
Silver Springs Mng. Co. ....May 43  
Silver Star-Queens Mines  
Inc. ....Jan 40, Feb 36  
Mar 40, Jul 44  
Silver Wing Mng. Co. ....Nov 38,  
Dec 37  
Silver Syndicate Inc. ....Feb 35  
J. R. Simplot Co. ....Aug 43  
Aug 45, Sep 60  
Smith, Charles ....Aug 43  
Smith-Douglas ....Dec 35  
Smith, Edward ....Jun 41  
Socony-Mobil Oil ....Dec 35  
Southern Cement Co. ....Feb 35  
Spokane Abrasive Co. ....Sep 69  
Spokane Nat. Mines Feb 37 Aug 45  
Standard Chemical Co. ....Jun 41  
Standard Metals Corp. ....Jan 40  
Feb 33, Jul 41, Aug 44, Sep 58  
Standard Oil N. J. ....Nov 36  
Steinfeld, A. ....Dec 36  
Stone Products Co. ....May 41  
Stovall Copper Co. ....Oct 43,  
Dec 36  
Strong and Harris, ....Feb 32 Aug 42  
Sunny Peak Mining Co. ....Jul 46  
Superior Oil Co. of Calif. ....Sep 68  
Sunshine Consolidated Inc. ....Sep 62  
Sunshine Mining Co. ....Jan 11  
Jan 44, Feb 36, 40, Aug 45  
Sep 53, 54, 62, Nov 39, Dec 38  
Superior Oil Company ....May 45  
Superior Stone Co. ....Apr 26, 27  
Susquehanna Corporation ....Mar 45  
Susquehanna-Western Corp. Apr 31  
May 37, Jul 42, 46, Sep 66, 69  
Swindell-Dressler Corp. ....Oct 45

**-T-**

TXL Oil Corporation ....Aug 47  
Techmanix Corp. ....Dec 40  
Tenneco Oil Co. ....Sep 68  
Tennessee Coal & Iron Div. Nov 39  
Texas Gulf Sulphur Co. ....Feb 33  
Mar 28, May 43, Jul 43, 46  
Aug 44, Sep 68, 69, Oct 48  
Nov 35, 43, Dec 35, 37  
Tennessee Copper Co. ....Jun 45  
Jul 43\*, Sep 60, Oct 42\*  
Tennessee Corp. ....Dec 35  
J. A. Tertling & Sons ....Oct 45  
Texas Zinc Minerals Corp. May 37  
May 43, Sep 68  
Thiele Kaolin Co. ....Oct 44  
Thomas Consol. Inc. ....Apr 30  
Thomas Mines, Inc. ....May 45  
Thunderbird Mining Co. ....May 46  
Tidewater Oil Co. ....Jun 43  
Tintic Standard Mining Co. Mar 43  
Tonopah Chemical Silver  
Co. ....Nov 42  
Tonopah Extension Mng.  
Co. ....Sep 64  
Tri-Nite Mining Co. ....Oct 48  
Tri-State Zinc Co. ....Jun 45  
Triumph Gold Mines Co. ....Jul 40  
Tungsten Mining Corp. ....Apr 27  
Oct 44

**-U-**

Union Carbide Nuclear Co. May 37  
Jun 44, Jul 41, Sep 58, Nov 38  
Nov 42, Dec 36, 37  
Union Carbide Ore. Mar 38 Jun 43  
United Cascade Mng. Co. ....Jul 46  
United Nuclear Corp. ....May 37  
Aug 46, Sep 65  
United Park City ....Mar 43, May 46  
A.E.C. ....Feb 33, Jul 42  
U.S. Bureau of Mines ....Aug 21  
U.S. Geological Survey ....Feb 31  
Feb 30, Aug 44, 45, 46  
U. S. Borax & Chem. Corp. Apr 30  
Aug 21, Nov 37, Dec 36  
U. S. Magnetite ....Dec 36  
U.S. Smelting, Refining  
& Mining Co. ....Mar 37  
May 44, May 46, Jun 42  
Jul 41, Sep 55  
United States Steel Corp. ....Feb 38  
Feb 36, Mar 41, Apr 29, Aug 21  
Nov 39  
Universal Oil Prod. Co. ....Nov 36  
Uranco Mng. & Expl. Co. ....Mar 45  
Uranium Discovery & Dev.  
Co. ....Apr 46  
Uranium Mines, Inc. ....Nov 39  
Uranium Reduction Co. ....Mar 44  
Apr 26  
Utah Constr. & Mng. Co. ....Feb 38  
Mar 39, May 37, May 46, Jul 46  
Aug 41\*, 48, 21 Dec 39  
Utex Exploration Co. ....Mar 44  
Nov 42

**-V-Z-**

Vanadium Corp. of America Feb 34  
Mar 43, Apr 24, May 37, Jul 41  
Aug 44, 46, Oct 46, Dec 37  
Vinnell Corp. ....Dec 38  
Virginia-Carolina Chem.  
Corp. ....Jun 46, Dec 35  
Virginia Granite Co. ....Apr 26\*  
Aug 41\*  
Vitro Chemical Co. ....Feb 37  
May 37, 45, Sep 66, 68  
Vitro Minerals Corp. ....Feb 38  
Mar 43, Jul 46, Sep 25\*  
Vitro Uranium Corp. ....Sep 69,  
Dec 40  
Wah Chang Corp. ....May 43  
Aug 47, Sep 66, 68  
Western Equities, Inc. ....Aug 42  
Western-Knapp Eng. May 45 Oct 46  
Western Standard Uranium  
Co. ....Feb 38  
West Coast Engr. ....Dec 38  
West Range Mines, Inc. ....Jan 38  
May 37, 38, Dec 36  
Western Beryllium Corp. ....Jan 42  
Western Contr. Corp. ....Jun 42  
Nov 35\*  
Western Equities, Inc. ....Jan 38  
Western Knapp Engineering Jan 42  
Western Nuclear Inc. ....Jan 43  
May 37, 46, Jul 46 Sep 69 Dec 44  
Western States Miner. Co. May 39  
White Caps Gold Mng. Co. Nov 41  
White Pine Copper Co. ....Jan 39  
Aug 21, 43  
Wilson Marine Transit Co. ....May 43  
Youngstown Sheet & Tube  
Co. ....Apr 26 Nov 39  
Yuba Consol. Indust. Inc. ....Jul 41  
Ziegler Chem. Mineral  
Corp. ....Apr 31  
Zinc Mining Co. ....Apr 30  
Zontelli Brothers ....Jul 40  
Zontelli Western Mng. ....Dec 36

**MONEY MAKING METHODS**

How to Make Your Own Pulp  
Density Measuring Gauge ....Aug 39\*  
Consolidated Zinc's Bearing Plate  
Makes Square Setting Safer  
Aug 39  
Use New Coromant Guide Tube  
to Drill Straight Long Holes Aug 39

**GEOLOGISTS NOTEBOOK**

Geophysics Points the Way to  
Nevada Minerals ....Jan 33\*  
New Magnetic High Found in  
South Dakota ....Apr 18\*

**CONVENTIONS**

AMC Consensus-Industry Outlook  
Best in Years ....Sept 40-41\*  
Americans Attend and Present  
Papers at International Minerals  
Congress ....July 30-31\*  
Denver Host for 66th Annual  
National Western Mining Confer-  
ence ....Mar 24  
International Minerals Congress,  
Cannes, France ....June 63  
Stanford-Arizona Computer Sym-  
posium—Stanford, Calif. June 1963

